

"If war were declared to-morrow, what would we do for aircraft?"

AVIATION

MARCH 26, 1923

Issued Weekly

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New Aerial View of the National Capitol

(c) *Reed in Black*

VOLUME
XIV

SPECIAL FEATURES

Number
13

INDUSTRIAL MOBILIZATION AND AVIATION
REORGANIZATION OF THE CURTISS CORPORATION
TOTAL COST OF WAR AVIATION — \$382,111,000.00
THE NEW BRITISH CIVIL AIR TRANSPORT SUBSIDY PLAN

THE GARDNER, MOFFAT CO., INC.

HIGHLAND, N. Y.

225 FOURTH AVENUE, NEW YORK

Pioneer designers and manufacturers
of
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Contractors to the United States Government

CURTISS AEROPLANE AND MOTOR CORPORATION
GARDEN CITY, NEW YORK



MARCH 26, 1923

VOL. XIV. NO. 13

AVIATION

Member of the Audit Bureau of Circulations

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2, 1893.*

THOMAS-MORSE AIRCRAFT CORPORATION

CONTRACTORS TO U. S. GOVERNMENT

ITHACA,



NEW YORK

MEASURING UP TO A FAMOUS NAME

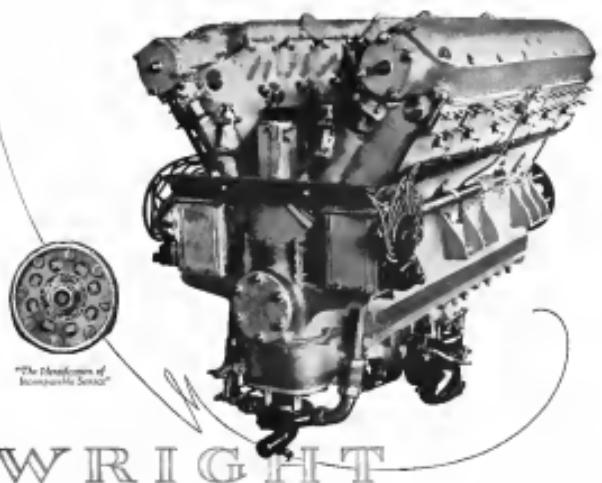
BACK of the name "Wright" lies the nineteen-year-old tradition to bring to the advancement of flying only the highest engineering principles and experience.

Accurately measuring the several phases of progress through which aviation has passed are the milestones of Wright Achievement covering the period of these nineteen years.

Only with a production organization capable of interpreting this wide engineering experience in terms of quality product could this company feel that it truly represented the impulse and high ideals of its founders.

WRIGHT AERONAUTICAL CORPORATION
PATERSON, NEW JERSEY, U.S.A.

Model Engine RP
Manufactured for
International Air Races
by the Wright Brothers



L. D. GARNER PRESIDENT
W. D. MORSE VICE PRESIDENT
W. J. STANLEY TREASURER
GEORGE KIRKOLIS BUSINESS MANAGER

Vol. XIV

MARCH 26, 1935

LAWRENCE O'DAY CHIEF
VERNON E. CLARK
EDWARD P. WALKER
RALPH H. UPTON
CONTRIBUTING EDITORS

AVIATION

Air Protection

LONDON buildings, including dwellings and shelters, must be equipped to protect the inhabitants against future aerial warfare, says a report just issued by a semi-official organization, the British Fire Prevention Committee. The committee recommends that in new structures no brick and old ones reconstructed, special efforts should be made to make them safe against air bombs. It adds:

"It will be conceded, we doubt, that in future it is probable that instead of our formal declaration of war, the first a country will have of the commencement of hostilities will be a shower of bombs on its capital or some large city."

This opinion, coming as it does just at the time when the subject of the bombing of cities has been under discussion at the League in a great universe, brings to the notice of the world that bombing of unprotected cities is going to be an act the importance must definitely be given to future wars.

The committee's desire is not the fact that such warfare is regarded as inhuman and contrary to international agreements, but that more careful and weaker nation may find itself in hard pressed and without other available means of defense which it will justify, its action on the grounds that self-preservation is the first law of nations.

A similar situation exists in gas warfare. Some agreements have been entered into regarding the use in which gas may be put to warfare, but military and naval authorities seem to feel that they must be prepared in case such restrictions should be violated. In the same way the best aviation strategists are not satisfied with the international agreements, but prepare for violations.

Popular adherence of all forms of war to new death dealing instruments is not natural. It was not so prevalent when powder was first used. Hand to hand combat was then regarded as the only rational form of combat. When gun powder separated the combatants and did not give the attacked what then seemed a fair opportunity of personal defense, popular opinion strongly protested against the use of such destruction. At a later time, when cities were shelled by artillery or even guns, the sense of justice was in evidence. In the last war gas warfare and aerial bombing were the new elements introduced.

Just what the difference between bombing a city by the British and by an aircraft is, would be hard to explain, except on the grounds of novelty. If bombing of undefended cities is to be prohibited, shelling of them by aircraft should be similarly suppressed. In other words, aircraft should not be regarded as more inhuman than the older arms just because it is more effective.

Locs are only expressions of the highest conceptions of peoples. Their enforcement is the problem that hangs out the ever present danger of violations. While no one can be-

See that valiant workers will ever be compromised by the United States. It must always be realized that we must be ready to protect our citizens from attack of authors, whether individuals or nations.

December 17, 1934

THE twentieth anniversary of the first mechanized flight, accomplished by Wilbur and Orville Wright on Dec. 17, 1903, occurs this year. As yet no adequate plan has been prepared fittingly to celebrate this anniversary which in substance to come will be considered as one of the milestones of modern civilization.

It would be naturally fitting that an exposition of some kind be held at which the earliest developments in aeronautics would be shown to the public. As an encyclopedic, the governmental air services might arrange a flying meet in which the latest types of aircraft would be flown, not for peace, but in honor of the first great pioneers.

International congresses have been held in Europe at which representatives of the countries interested in aeronautics have met to discuss the outstanding aeronautical problems of the day. What better form could such a celebration take than an International Air Congress to which representatives from all parts of the world would gather to show their appreciation of the great work done by the famous brothers from Dayton.

The Cost of War Aviation

THE figures on the cost of war warfare accumulated after which Max de M. Massé M. Pfeiffer, Chief of Air Service, and not public, and which are reproduced in this issue, show that the cost, actually spent by the Army Air Service in the war with Germany, was approximately \$200,000,000.

It would be good if this fact received the widest possible publicity so that the public may be familiarized of the fact that our war-time aircraft expenditures amounted to "a billion and a half dollars." This sum has received such wide credence that a determined effort should be made to explode it, now that the facts of the case have been established.

50 Cents for Aviation

IS aviation the amount of money paid by each worker in the United States to it found that out of every one hundred dollars spent by the government the sum of eleven dollars and eighty cents goes to the War Department, and of this fifteen cents is spent on the Air Service.

One half of one per cent for national defense by means of air power does not appear to be a heavy burden on the American taxpayer.

"If war were declared tomorrow what would we do for aircraft?"

President Harding Commends Aeronautic Executives

THE WHITE HOUSE

Washington

February 28, 1923.

My dear Mr. Byrnes:

It is a pleasure to make acknowledgement of the fine contributions which the Aeronautic Executives Association has made in behalf of aviation in this country. It is a great credit, a little hard for me to believe that there should still be at this late date occasions for special efforts at arousing and maintaining public interest in this new mode of transportation and of national defense. To me, the recognition of making a special effort to arouse interest in aeronautics seems a good idea. The great back eight or ten years of our efforts are definitely in aeronautics now. It is my opinion, as appears that the aeronautics of the air is bound to be one of the most important modes of transportation, as it is that the aeronautics of the land highways already become such a facility. Rapid, safe and economical transportation seems very near to being the very corner stone of our modern civilization. Certainly we cannot doubt that the highroads of the air are destined to be among the most used and useful means of transportation. Every contribution to the development of this new art must, therefore, be a contribution to the growth of better civilization.

Most sincerely yours,
(Signed) WARREN G. HARDING

Mr. E. E. Byrnes,
49 Wall Street,
New York City.

The present interest President Harding takes in aeronautics and our work shows that his interest has been well deserved, which he recently addressed to B. W. McRae, secretary of the Aeronautic Executives Association. This association, through the medium of monthly meetings at which eminent aeronautic topics are discussed by authoritative speakers, familiarizes executives of aeronautic firms with an interesting and informative series of programs which is prominently appreciated in the aeronautic world.

Following are some of the high lights developed in the course of these meetings:

"The future of aviation has today greater possibilities than the natural had twenty years ago." (Dr. Charles E. Luce, Vice-Chairman, and recently assistant to the president of the Erie Railroad.)

"A commercial aircraft company must have capital enough to equip its flying planes, maintain its personnel and spend its money in the right way to be successful." (Dr. E. C. G. Holden, President of the Aeromarine Propeller Co.)

"A commercial aircraft company can operate on the air-mail routes and make a profit. The principal earnings of the Air Mail Service are derived from the airmail business. (Dr. W. H. Wheeler, representative of the Federal Reserve Co.)

"We are on the verge of a very great development in aeronautics, but this won't come from within the industry. Most contracts will be a long step forward." (Maj. Dr. G. Guardia, co-president of the Board of Advisors of New York.)

"We want wings on our aerial ambulances now if we want to return the health of the nation." (Dr. J. Kenney, Director, National Vigilance Committee.)

Airport at St. Joseph, Mo.

The Chamber of Commerce of St. Joseph, Mo., advises that the city now has a seasonal landing field which will be dedicated and opened on or about May 3.

The field will be equipped to furnish service with oil and gasoline and mechanical service.

"If war were declared to-morrow what would we do for aircraft?"

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Rolls-Royce "Eagle IX" Aero Engine

The Latest Model of a Famous War Engine

The Rolls-Royce "Eagle" engine was originally produced for fighting purposes early in the War, and has probably a longer record of continuous development and useful service than any other war engine. The first "Eagle" engine was produced in 1916, and the Rolls-Royce policy of persistent endeavor to develop and improve development has been consistently maintained. It is to be observed that the policy of the designers to give reliability first, as in their opinion it is the most essential feature in aviation.

After a considerable amount of practical experience in the air, followed by much experimenting and testing, a new and greatly improved "Eagle" engine has been developed and put

into use, known as the "Eagle IX". The substitution of two carburetors in place of four considerably facilitates engine tuning and is an improvement, combined with the new induction system, for the mixture to the various cylinders. In order to prevent gravity fuel to be used in so important an engine as possible, the four fuel tanks have been mounted on the engine, each tank being supplied with a float and fuel only 8 in. above the center line of the crankshaft, which is a great advantage in the design of the complete engine. The danger of fire has been considerably reduced by certain alterations in the design of the carburetors.

Alterations in design have resulted in particularly much economy in the use of material, though it is not easy to measure the economy of the engine in this measure. The engine has been modified in India, in order to provide increased strength as wearing qualities whether operation has shown that the improvements could be effected.

In the early days can be seen the big shaft, in which all the engines are led, then engine, then cylinder and change of engine, then cylinder and change of engine. The last engine to be seen is the handle which is always at the rear of the engine in most aeroengines and all driven clutch wheels may be used to turn the handle shaft down to any position required. The position is shown with the ingenuity suggested, and with which a curved gear is used to turn the engine shaft with a wireless gear.

The rubber connections to the gasoline feed have been entirely done away with, and the amount of piping reduced to a minimum.

The principal characteristics of the Rolls-Royce "Eagle IX" engine are as follows:

CHARACTERISTICS OF THE ROLLS-ROYCE "EAGLE IX"

No. of cylinders: 12

Stroke: 6 in.

Boiler pressure: 1000 lbs per square inch.

No. of carburetors: 2.

Induction system: 2.

Exhaust system: 2.

Maximum power: 1,000 h.p. at 1,600 r.p.m.

Maximum torque: 1,000 ft. lbs. at 1,400 r.p.m.

Maximum speed: 1,600 r.p.m.

Maximum fuel consumption: 100 lbs per hour.

Maximum oil consumption: 10 lbs per hour.

Maximum water consumption: 10 lbs per hour.

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Maximum water consumption

Distinguished Service Cross Awards—The War Department announces the following awards of the Distinguished Service Cross:

First Lieutenant Thomas J. Neister, of Cleveland, Ohio, for extraordinary heroism in action near Chateau, France, Aug. 14, 1918. While flying over the Chateau, Lt. Neister's plane was hit by the 50th Division, 8th F. B. Wing. With a formation of ten machines he attacked enemy gun positions, shooting down one in flames. During the fight he was shot in the leg and his machine took two hits. By skillful maneuvering he avoided the fire, becoming unconscious from loss of blood. He was captured Aug. 15, 1918, at Chateau, France, and held as a prisoner. While in prison he was the subject of the most severe treatment. On Aug. 15, he joined an attack on an audience of Germans from 300 ft., killing 2 enemy machine gunners and wounding one. The Germans, still determined to avenge the loss of their plane, took him to a hospital and operated on his leg.

First Lieutenant John D. Doolittle, of Washington, D. C., was awarded a Distinguished Service Cross in the Service of War medals for devotion to duty, and gallantry in face of the enemy, while a lead bombardier in the U. S. Air Service attached to the 10th Squadron, R. A. F. The award was for extraordinary heroism in action near Chateau, France, Aug. 14, 1918. On Aug. 12, 1918, he attacked a formation of 100 Fokkers and shot down one in flames. On Aug. 15, 1918, he engaged the enemy over Chateau, shooting one down to earth to the ground. On Sept. 6, 1918, over St. Mihiel, he engaged one of the three enemy planes, shooting a British observer down to the ground. On Aug. 15, over Chateau, he attacked 10 Fokkers, shooting down one. On Aug. 16, over Chateau, he downed one plane, shooting down one of several. On Aug. 18, over France, he got another, on Aug. 20, over Chateau another plane was driven down, making a total of seven.

Armed Battle for Their Lives—In Henry Sen.—Capt. R. J. Kieckhefer, Lt. Col. F. A. Johnson, and Capt. W. E. G. Gandy of the 3d Aero Reconnaissance Squadron at Lake Park, H. M., had an opportunity to repel the attacks of Jules Tremblay, recently, when for no less than a hour after a forced landing at an ice field, H. M. Flying Boat, which had been wounded by the heavy anti-aircraft fire, settled with the surf and their machine gunners repelled the attacks of the bandit.

Strong assistance was rendered by the Commandant Officer of the Naval Air Station, and speed boats dispatched to the rescue. They arrived and after the seaplane had been taken aboard a large fishing schooner. No injuries were sustained, however, and it was later learned that the H. M. would remain afloat for 72 hours. The boat had half the top wing exposed for six or eight hours.

Naval Aviation

Many Contracts for Observation Planes—The Navy has made a contract with the L.W. Engineering Co., of College Point, N. Y., for twenty-six ND observation planes. The planes are planned for those who observe work and will be available for use on land or sea. The cost of these planes is to be paid in monthly instalments, it is said.

Training by British Naval Pilots—Arrangements whereby eligible and experienced naval aviators, over thirty years of age, receive free training in aviation in the United States, are now in progress in the United States Naval Reserve are announced by the British Reserve of New York City, through whose offices the planes were completed. The aviation division, said Col. John F. Davis, said in a communication: "We want young men, who are to become naval aviators, to be commissioned officers and first lieutenants in the Naval Reserve."

The course will consist at a summer session at Fort Totten, where the rudiments and rudimentary knowledge will be taught. The second year there will be forty days of intensive training at a land station and the third year forty-five days at sea.

"If war were declared to-morrow what would we do for aircraft?"



FAIRBIRN

AEROMARINE AIRWAYS, INC.
Daily Service Key West to Barrow
81 Passengers Flying Cruises

FAIRBIRN

MID-WEST AIRWAYS CORP.
800 W. MADISON, ILL.
One of the first and oldest air lines
from Chicago to the West and Midwest
Operating Flights to Toledo, St. Louis, and Peoria.

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10000 ft. Long Lake
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CITY OF NEW YORK, LONG ISLAND
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CURTISS AEROPLANE & MOTOR CORPORATION

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AEROMARINE AIRWAYS, INC.
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81 Passengers Flying Cruises 2 passengers open and
closed Flying Buses. Night Flying. Night to Stem
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FAIRBIRN

CUSTIS-WISCONSIN AIRCRAFT CO.
FLYING SCHOOL
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10000 ft. Chelan, Wash.

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with us.*

26 Consecutive Insertions \$29.00

Can You Give Service Like This?

When the "St. Louisian" left Mr. Haskell in Dayton the Telegram shows

We Caught His Train.

EQUIP YOUR PLANE WITH NEW MATERIAL AND BE PREPARED—IT PAYS.

RETROFITS

	Older	Model	Type	Price
Altimeter	0-10 ft.	Indicates	ft.	\$25.00
Altimeter	0-2500 ft.	Indicates	ft.	\$25.00
Altimeter	0-5000 ft.	Indicates	ft.	\$25.00
Altimeter	0-10,000 ft.	Indicates	ft.	\$25.00
Altimeter	0-20,000 ft.	Indicates	ft.	\$25.00
Altimeter	0-30,000 ft.	Indicates	ft.	\$25.00
Altimeter	0-40,000 ft.	Indicates	ft.	\$25.00
Altimeter	0-50,000 ft.	Indicates	ft.	\$25.00
Altimeter	0-60,000 ft.	Indicates	ft.	\$25.00
Altimeter	0-70,000 ft.	Indicates	ft.	\$25.00
Altimeter	0-80,000 ft.	Indicates	ft.	\$25.00
Altimeter	0-90,000 ft.	Indicates	ft.	\$25.00
Altimeter	0-100,000 ft.	Indicates	ft.	\$25.00
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Altimeter	0-120,000 ft.	Indicates	ft.	\$25.00
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